



# Deutsche Bank AG

## Securities Linked to an Index Basket

Deutsche Bank AG may from time to time offer and sell certain securities linked to an index basket (collectively, the “**Securities**”) as part of our Global Notes Program, Series A. This underlying supplement describes some of the potential indices included in the basket to which the Securities may be linked, as well as related matter concerning the relationship, if any, between Deutsche Bank AG and the sponsors or publishers of each index. Additional specific terms of any Securities that we offer, including any additions or changes to the terms specified in the product supplement relating to your Securities or the descriptions of the indices contained in this underlying supplement, will be described in a separate free writing prospectus, term sheet or pricing supplement, which we refer to as a “**pricing supplement**.” If there is any inconsistency between the terms described in the relevant pricing supplement and those described in this underlying supplement or in the accompanying prospectus, prospectus supplement or product supplement, the terms described in the relevant pricing supplement will be controlling.

This underlying supplement describes only select indices which may be included in the basket to which the Securities may be linked. We do not guarantee that we will offer Securities linked to a basket containing any of the indices described in this underlying supplement. In addition, we may in the future offer Securities linked to a basket containing an index that is not described in this underlying supplement. In such an event, we will describe any such additional index in the relevant pricing supplement.

Issuer: Deutsche Bank AG, London Branch.

Underlying Indices: the S&P 500<sup>®</sup> Index, the Dow Jones EURO STOXX 50<sup>®</sup> Index, the Nikkei<sup>®</sup> 225 Index, the Hang Seng China Enterprises Index, the KOSPI 200 Index and the MSCI Singapore Index<sup>SM</sup>.

**Investing in the Securities involves a number of risks. See “Risk Factors” in the relevant product supplement and “Key Risks” in the relevant pricing supplement for risks related to an investment in the Securities.**

**Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of the Securities or passed upon the adequacy or accuracy of this underlying supplement or the accompanying prospectus, prospectus supplement or product supplement. Any representation to the contrary is a criminal offense.**

The Securities are not bank deposits and are not insured by the Federal Deposit Insurance Corporation or any other governmental agency.

**Deutsche Bank AG**

April 30, 2007

## ADDITIONAL INFORMATION ABOUT THE SECURITIES

You should read this underlying supplement together with the prospectus dated October 10, 2006, as supplemented by the prospectus supplement dated November 13, 2006, relating to our Series A global notes, of which these Securities are a part, and any relevant product supplement and pricing supplement that we may file with the SEC from time to time, which contains a description of the terms of particular categories of Securities or the specific terms of your Securities. You may access these documents on the SEC website at [www.sec.gov](http://www.sec.gov) as follows (or if such address has changed, by reviewing our filings for the relevant date on the SEC website):

- Prospectus supplement dated November 13, 2006:  
<http://www.sec.gov/Archives/edgar/data/1159508/000119312506233129/d424b3.htm>
- Prospectus dated October 10, 2006:  
<http://www.sec.gov/Archives/edgar/data/1159508/000095012306012432/u50845fv3asr.htm>

Our Central Index Key, or CIK, on the SEC website is 0001159508. As used in this underlying supplement, “**we**,” “**us**” or “**our**” refers to Deutsche Bank AG, including, as the context requires, acting through one of its branches.

You should carefully consider, among other things, the matters set forth in “Risk Factors” in the relevant product supplement, as the Securities involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisers before deciding to invest in the Securities.

## UNDERLYING SUPPLEMENT SUMMARY

*This underlying supplement describes some of the potential indices to which the Securities may be linked and the relationship, if any, between Deutsche Bank AG and the sponsors or publishers of each such index. If there is any inconsistency between the terms described in the relevant pricing supplement and those described in this underlying supplement, the terms described in the relevant pricing supplement will be controlling. Any relevant pricing supplement should also be read in connection with this underlying supplement, the relevant product supplement and the accompanying prospectus and prospectus supplement.*

*In this underlying supplement, when we refer to the “**Securities**,” we mean certain Securities that may be offered by Deutsche Bank AG from time to time linked to an index basket. Also, references to the “**accompanying prospectus**” and “**prospectus supplement**” mean, respectively, the accompanying prospectus, dated October 10, 2006, of Deutsche Bank AG and the prospectus supplement, dated November 13, 2006, of Deutsche Bank AG, and references to “**relevant product supplement**” refer to the relevant product supplement that we may file from time to time relating to the particular category of your Securities. References to the “**relevant pricing supplement**” mean the pricing supplement and any free writing prospectus that describe the specific terms of your Securities.*

### **Specific Terms Will Be Described in Relevant Pricing Supplements**

The relevant product supplement describes some of the general terms that apply to each category of Securities and the general manner in which they may be offered. Deutsche Bank AG may also prepare one or more pricing supplements that describe particular issuances of Securities. The specific terms for your Securities will be described in the relevant pricing supplement, including any additions or changes to the terms specified in the relevant product supplement or the descriptions of the indices set forth in this underlying supplement. Any relevant pricing supplement, including any free writing prospectus, should be read in connection with this underlying supplement, the relevant product supplement and the accompanying prospectus and prospectus supplement.

### **Licenses**

Unless otherwise specified in the relevant pricing supplement, Deutsche Bank AG has contracted with the sponsor or publisher of each index included in the basket to which your Securities may be linked for the rights to use such index and certain associated trademarks or service marks for such index. Deutsche Bank AG generally obtains these licenses either on an individual basis for a particular offering of Securities or for a term of years. Although Deutsche Bank AG anticipates that it will continue to enter into and renew such licenses, any such license could be terminated upon the occurrence of certain events in the future.

## UNDERLYING INDICES

### The S&P 500® Index

We have derived all information contained in this underlying supplement regarding the S&P 500® Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information. Such information reflects the policies of, and is subject to change by, S&P. The S&P 500® Index was developed by S&P and is calculated, maintained and published by S&P. We make no representation or warranty as to the accuracy or completeness of such information.

The S&P 500® Index is intended to provide a performance benchmark for the U.S. equity markets. The calculation of the level of the S&P 500® Index (discussed below in further detail) is based on the relative value of the aggregate Market Value (as defined below) of the common stocks of 500 companies (the “**S&P 500® Component Stocks**”) as of a particular time as compared to the aggregate average Market Value of the common stocks of 500 similar companies during the base period of the years 1941 through 1943. Historically, the “**Market Value**” of any S&P 500® Component Stock was calculated as the product of the market price per share and the number of the then outstanding shares of such S&P 500® Component Stock. As discussed below, on March 21, 2005, S&P began to use a new methodology to calculate the Market Value of the S&P 500® Component Stocks and on September 16, 2005, S&P completed its transition to the new calculation methodology. The 500 companies are not the 500 largest companies listed on the NYSE and not all 500 companies are listed on such exchange. S&P chooses companies for inclusion in the S&P 500® Index with an aim of achieving a distribution by broad industry groupings that approximates the distribution of these groupings in the common stock population of the U.S. equity market. S&P may from time to time, in its sole discretion, add companies to, or delete companies from, the S&P 500® Index to achieve the objectives stated above. Relevant criteria employed by S&P include the viability of the particular company, the extent to which that company represents the industry group to which it is assigned, the extent to which the company’s common stock is widely-held and the Market Value and trading activity of the common stock of that company.

On March 21, 2005, S&P began to calculate the Index based on a half float-adjusted formula, and on September 16, 2005 the Index became fully float adjusted. S&P’s criteria for selecting stocks for the Index have not been changed by the shift to float adjustment. However, the adjustment affects each company’s weight in the Index (*i.e.*, its Market Value).

Under float adjustment, the share counts used in calculating the Index reflect only those shares that are available to investors, not all of a company’s outstanding shares. S&P defines three groups of shareholders whose holdings are subject to float adjustment:

- holdings by other publicly traded corporations, venture capital firms, private equity firms, strategic partners, or leveraged buyout groups;
- holdings by government entities, including all levels of government in the United States or foreign countries; and
- holdings by current or former officers and directors of the company, founders of the company, or family trusts of officers, directors, or founders, as well as holdings of trusts, foundations, pension funds, employee stock ownership plans, or other investment vehicles associated with and controlled by the company.

However, treasury stock, stock options, restricted shares, equity participation units, warrants, preferred stock, convertible stock, and rights are not part of the float. In cases where

holdings in a group exceed 10% of the outstanding shares of a company, the holdings of that group will be excluded from the float-adjusted count of shares to be used in the Index calculation. Mutual funds, investment advisory firms, pension funds, or foundations not associated with the company and investment funds in insurance companies, shares of a United States company traded in Canada as “exchangeable shares,” shares that trust beneficiaries may buy or sell without difficulty or significant additional expense beyond typical brokerage fees, and, if a company has multiple classes of stock outstanding, shares in an unlisted or non-traded class if such shares are convertible by shareholders without undue delay and cost, are also part of the float.

For each stock, an investable weight factor (“**IWF**”) is calculated by dividing the available float shares, defined as the total shares outstanding less shares held in one or more of the three groups listed above where the group holdings exceed 10% of the outstanding shares, by the total shares outstanding. (On March 21, 2005, the S&P 500® Index moved half way to float adjustment, meaning that if a stock has an IWF of 0.80, the IWF used to calculate the Index between March 21, 2005 and September 16, 2005 was 0.90. On September 16, 2005, S&P began to calculate the Index on a fully float-adjusted basis, meaning that if a stock has an IWF of 0.80, the IWF used to calculate the S&P 500® Index on and after September 16, 2005 is 0.80.) The float-adjusted Index is calculated by dividing the sum of the IWF multiplied by both the price and the total shares outstanding for each stock by the index divisor. For companies with multiple classes of stock, S&P will calculate the weighted average IWF for each stock using the proportion of the total company market capitalization of each share class as weights.

As of the date of this underlying supplement, the S&P 500® Index is calculated using a base-weighted aggregate methodology: the level of the S&P 500® Index reflects the total Market Value of all 500 S&P 500® Component Stocks relative to the S&P 500® Index’s base period of 1941–43 (the “**Base Period**”).

An indexed number is used to represent the results of this calculation in order to make the value easier to work with and track over time.

The actual total Market Value of the S&P 500® Component Stocks during the Base Period has been set equal to an indexed value of 10. This is often indicated by the notation 1941–43=10. In practice, the daily calculation of the S&P 500® Index is computed by dividing the total Market Value of the S&P 500® Component Stocks by a number called the Index Divisor. By itself, the Index Divisor is an arbitrary number. However, in the context of the calculation of the S&P 500® Index, it is the only link to the original Base Period level of the S&P 500® Index. The Index Divisor keeps the S&P 500® Index comparable over time and is the manipulation point for all adjustments to the Index (“**Index Maintenance**”).

Index Maintenance includes monitoring and completing the adjustments for company additions and deletions, share changes, stock splits, stock dividends and stock price adjustments due to company restructurings or spinoffs.

To prevent the level of the S&P 500® Index from changing due to corporate actions, all corporate actions which affect the total Market Value of the S&P 500® Index require an Index Divisor adjustment. By adjusting the Index Divisor for the change in total Market Value, the level of the S&P 500® Index remains constant. This helps maintain the level of the S&P 500® Index as an accurate barometer of stock market performance and ensures that the movement of the S&P 500® Index does not reflect the corporate actions of individual companies in the S&P 500® Index. All Index Divisor adjustments are made after the close of trading and after the calculation of the Basket Closing Level. Some corporate actions, such as stock splits and stock dividends,

require simple changes in the common shares outstanding and the stock prices of the companies in the Index and do not require Index Divisor adjustments.

The table below summarizes the types of the S&P 500® Index maintenance adjustments and indicates whether or not an Index Divisor adjustment is required.

<u>Type of Corporate Action</u>	<u>Adjustment Factor</u>	<u>Divisor Adjustment Required</u>
Stock split ( <i>e.g.</i> , 2-for-1)	Shares Outstanding <i>multiplied by 2</i> ; Stock Price <i>divided by 2</i>	No
Share Issuance ( <i>i.e.</i> , change $\geq 5\%$ )	Shares Outstanding <i>plus</i> newly issued Shares	Yes
Share Repurchase ( <i>i.e.</i> , change $\geq 5\%$ )	Shares Outstanding <i>minus</i> Repurchased Shares	Yes
Special Cash Dividends	Share Price <i>minus</i> Special Dividend	Yes
Company Change	Add new company Market Value <i>minus</i> old company Market Value	Yes
Rights offering	Price of parent company <i>minus</i> $\left( \frac{\text{Price of Rights}}{\text{Right Ratio}} \right)$	Yes
Spinoffs	Price of parent company <i>minus</i> $\left( \frac{\text{Price of Spinoff Co.}}{\text{Share Exchange Ratio}} \right)$	Yes

Stock splits and stock dividends do not affect the Index Divisor of the S&P 500® Index, because following a split or dividend both the stock price and number of shares outstanding are adjusted by S&P so that there is no change in the Market Value of the S&P 500® Component Stock. All stock split and dividend adjustments are made after the close of trading on the day before the ex-date.

Each of the corporate events exemplified in the table requiring an adjustment to the Index Divisor has the effect of altering the Market Value of the S&P 500® Component Stock and consequently of altering the aggregate Market Value of the S&P 500® Component Stocks (the "**Post-Event Aggregate Market Value**"). In order that the level of the S&P 500® Index (the "**Pre-Event Index Value**") not be affected by the altered Market Value (whether increase or decrease) of the affected S&P 500® Component Stock, a new Index Divisor ("**New Divisor**") is derived as follows:

$$\frac{\text{Post-Event Aggregate Market Value}}{\text{New Divisor}} = \text{Pre-Event Index Value}$$

$$\text{New Divisor} = \frac{\text{Post-Event Aggregate Market Value}}{\text{Pre-Event Index Value}}$$

A large part of the Index maintenance process involves tracking the changes in the number of shares outstanding of each of the S&P 500® Index companies. Four times a year, on a Friday



close to the end of each calendar quarter, the share totals of companies in the S&P 500® Index are updated as required by any changes in the number of shares outstanding. After the totals are updated, the Index Divisor is adjusted to compensate for the net change in the total Market Value of the Index. In addition, any changes over 5% in the current common shares outstanding for the Index companies are carefully reviewed on a weekly basis, and when appropriate, an immediate adjustment is made to the Index Divisor.

### **License Agreement with S&P**

We have entered into an agreement with S&P providing us and certain of our affiliates or subsidiaries identified in that agreement with a non-exclusive license and, for a fee, with the right to use the S&P 500® Index, which is owned and published by S&P, in connection with certain securities, including the Securities.

The Securities are not sponsored, endorsed, sold or promoted by Standard & Poor's, a division of the McGraw-Hill Companies, Inc., which we refer to as S&P. S&P makes no representation or warranty, express or implied, to the owners of the Securities or any member of the public regarding the advisability of investing in securities generally or in the Securities particularly, or the ability of the S&P 500® Index to track general stock market performance. S&P's only relationship to Deutsche Bank AG is the licensing of certain trademarks and trade names of S&P without regard to Deutsche Bank AG or the Securities. S&P has no obligation to take the needs of Deutsche Bank AG or the holders of the Securities into consideration in determining, composing or calculating the S&P 500® Index. S&P is not responsible for and has not participated in the determination of the timing, price or quantity of the Securities to be issued or in the determination or calculation of the amount due at maturity of the Securities. S&P has no obligation or liability in connection with the administration, marketing or trading of the Securities.

**S&P DOES NOT GUARANTEE THE ACCURACY AND/OR THE COMPLETENESS OF THE S&P 500® INDEX OR ANY DATA INCLUDED THEREIN AND S&P SHALL HAVE NO LIABILITY FOR ANY ERRORS, OMISSIONS OR INTERRUPTIONS THEREIN. S&P MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO RESULTS TO BE OBTAINED BY DEUTSCHE BANK AG, HOLDERS OF THE SECURITIES OR ANY OTHER PERSON OR ENTITY FROM THE USE OF THE S&P 500® INDEX OR ANY DATA INCLUDED THEREIN. S&P MAKES NO EXPRESS OR IMPLIED WARRANTIES, AND EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE S&P 500® INDEX OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL S&P HAVE ANY LIABILITY FOR ANY SPECIAL, PUNITIVE, INDIRECT OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.**

**"STANDARD & POOR'S", "S&P", "S&P 500" AND "500" ARE TRADEMARKS OF THE MCGRAW-HILL COMPANIES, INC. AND HAVE BEEN LICENSED FOR USE BY DEUTSCHE BANK AG. THIS TRANSACTION IS NOT SPONSORED, ENDORSED, SOLD OR PROMOTED BY S&P AND S&P MAKES NO REPRESENTATION REGARDING THE ADVISABILITY OF PURCHASING ANY OF THE SECURITIES.**

### **Discontinuation of the S&P 500® Index; Alteration of Method of Calculation**

If S&P discontinues publication of the S&P 500® Index and S&P or another entity publishes a successor or substitute index that the calculation agent determines, in its sole discretion, to be comparable to the discontinued Index (such index being referred to herein as an "S&P

successor index”), then any S&P 500® Index closing level will be determined by reference to the level of such S&P successor index at the close of trading on the NYSE, the AMEX, the Nasdaq National Market or the relevant exchange or market for the S&P successor index on the Final Valuation Date or other relevant date.

Upon any selection by the calculation agent of an S&P successor index, the calculation agent will cause written notice thereof to be promptly furnished to the trustee, to us and to the holders of the Securities.

If S&P discontinues publication of the S&P 500® Index prior to, and such discontinuance is continuing on, the Final Valuation Date or other relevant date, and the calculation agent determines, in its sole discretion, that no S&P successor index is available at such time, or the calculation agent has previously selected an S&P successor index and publication of such S&P successor index is discontinued prior to and such discontinuation is continuing on such Final Valuation Date or other relevant date, then the calculation agent will determine the S&P 500® Index closing level for such date. The S&P 500® Index closing level will be computed by the calculation agent in accordance with the formula for and method of calculating the S&P 500® Index or S&P successor index, as applicable, last in effect prior to such discontinuance, using the closing price (or, if trading in the relevant securities has been materially suspended or materially limited, its good faith estimate of the closing price that would have prevailed but for such suspension or limitation) at the close of the principal trading session on such date of each security most recently comprising the S&P 500® Index or S&P successor index, as applicable. Notwithstanding these alternative arrangements, discontinuance of the publication of the S&P 500® Index or S&P successor index, as applicable, on the relevant exchange may adversely affect the value of the Securities.

If at any time the method of calculating the S&P 500® Index or an S&P successor index, or the level thereof, is changed in a material respect, or if the S&P 500® Index or an S&P successor index is in any other way modified so that such index does not, in the opinion of the calculation agent, fairly represent the level of the S&P 500® Index or such S&P successor index had such changes or modifications not been made, then, from and after such time, the calculation agent will, at the close of business in New York City on each date on which the S&P 500® Index closing level is to be determined, make such calculations and adjustments as, in the good faith judgment of the calculation agent, may be necessary in order to arrive at a level of a stock index comparable to the S&P 500® Index or such S&P successor index, as the case may be, as if such changes or modifications had not been made, and the calculation agent will calculate the closing level with reference to the S&P 500® Index or such S&P successor index, as adjusted. Accordingly, if the method of calculating the S&P 500® Index or an S&P successor index is modified so that the level of the S&P 500® Index or such S&P successor index is a fraction of what it would have been if there had been no such modification (*e.g.*, due to a split in the S&P 500® Index or such S&P successor index), then the calculation agent will adjust the S&P 500® Index or such S&P successor index in order to arrive at a level of the S&P 500® Index or such S&P successor index as if there had been no such modification (*e.g.*, as if such split had not occurred).

### **The Dow Jones EURO STOXX 50® Index**

We have derived all information contained in this underlying supplement regarding the Dow Jones EURO STOXX 50® Index (“**Dow Jones EURO STOXX 50® Index**”), including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information. Such information reflects the policies of, and is subject to change by, STOXX Limited. The Dow Jones EURO STOXX 50® Index is calculated, maintained and



published by STOXX Limited. We make no representation or warranty as to the accuracy or completeness of such information.

The Dow Jones EURO STOXX 50® Index was created by STOXX Limited, a joint venture between Deutsche Börse AG, Dow Jones & Company ("**Dow Jones**") and SWX Swiss Exchange. Publication of the Dow Jones EURO STOXX 50® Index began on February 26, 1998, based on an initial Dow Jones EURO STOXX 50® Index value of 1,000 at December 31, 1991. The Dow Jones EURO STOXX 50® Index is published in *The Wall Street Journal* and disseminated on the STOXX Limited website: <http://www.stoxx.com>, which sets forth, among other things, the country and industrial sector weightings of the securities included in the Dow Jones EURO STOXX 50® Index and updates these weightings at the end of each quarter. Information contained in the STOXX Limited website is not incorporated by reference in, and should not be considered a part of, this underlying supplement.

### **Dow Jones EURO STOXX 50® Index Composition and Maintenance**

The Dow Jones EURO STOXX 50® Index is composed of 50 component stocks of market sector leaders from within the Dow Jones EURO STOXX® Index, which includes stocks selected from the Euro Zone. The component stocks have a high degree of liquidity and represent the largest companies across all market sectors defined by the Dow Jones Global Classification Standard.

The composition of the Dow Jones EURO STOXX 50® Index is reviewed annually, based on the closing stock data on the last trading day in August. The component stocks are announced on the first trading day in September. Changes to the component stocks are implemented on the third Friday in September and are effective the following trading day. Changes in the composition of the Dow Jones EURO STOXX 50® Index are made to ensure that the Dow Jones EURO STOXX 50® Index includes the 50 market sector leaders from within the Dow Jones EURO STOXX® Index. A current list of the issuers that comprise the Dow Jones EURO STOXX 50® Index is available on the STOXX Limited website: <http://www.stoxx.com>. Information contained in the STOXX Limited website is not incorporated by reference in, and should not be considered a part of, this underlying supplement.

The free float factors for each component stock used to calculate the Dow Jones EURO STOXX 50® Index, as described below, are reviewed, calculated and implemented on a quarterly basis and are fixed until the next quarterly review.

The Dow Jones EURO STOXX 50® Index is also reviewed on an ongoing basis. Corporate actions (including initial public offerings, mergers and takeovers, spin-offs, delistings and bankruptcy) that affect the Dow Jones EURO STOXX 50® Index composition are immediately reviewed. Any changes are announced, implemented and effective in line with the type of corporate action and the magnitude of the effect.

### **Dow Jones EURO STOXX 50® Index Calculation**

The Dow Jones EURO STOXX 50® Index is calculated with the "**Laspeyres formula**," which measures the aggregate price changes in the component stocks against a fixed base quantity weight. The formula for calculating the Dow Jones EURO STOXX 50® Index value can be expressed as follows:

$$\text{Index} = \frac{\text{free float market capitalization of the Dow Jones EURO STOXX 50® Index}}{\text{adjusted base date market capitalization of the Dow Jones EURO STOXX 50® Index}} \times 1,000$$

The “**free float market capitalization of the Dow Jones EURO STOXX 50® Index**” is equal to the sum of the products of the closing price, market capitalization and free float factor for each component stock as of the time the Dow Jones EURO STOXX 50® Index is being calculated.

The Dow Jones EURO STOXX 50® Index is also subject to a divisor, which is adjusted to maintain the continuity of Dow Jones EURO STOXX 50® Index values despite changes due to corporate actions. The following is a summary of the adjustments to any component stock made for corporate actions and the effect of such adjustment on the divisor, where shareholders of the component stock will receive “B” number of shares for every “A” share held (where applicable).

<p>(1) <i>Split and reverse split:</i></p> <p>Adjusted price = closing price * A/B</p> <p>New number of shares = old number of shares * B/A</p> <p>Divisor: no change</p>	<p>(2) <i>Rights offering:</i></p> <p>Adjusted price = (closing price * A + subscription price * B) / (A + B)</p> <p>New number of shares = old number of shares * (A + B) / A</p> <p>Divisor: increases</p>
<p>(3) <i>Stock dividend:</i></p> <p>Adjusted price = closing price * A / (A + B)</p> <p>New number of shares = old number of shares * (A + B) / A</p> <p>Divisor: no change</p>	<p>(4) <i>Stock dividend of another company:</i></p> <p>Adjusted price = (closing price * A - price of other company * B) / A</p> <p>Divisor: decreases</p>
<p>(5) <i>Return of capital and share consideration:</i></p> <p>Adjusted price = (closing price - dividend announced by company * (1-withholding tax)) * A / B</p> <p>New number of shares = old number of shares * B / A</p> <p>Divisor: decreases</p>	<p>(6) <i>Repurchase shares / self tender:</i></p> <p>Adjusted price = ((price before tender * old number of shares) - (tender price * number of tendered shares)) / (old number of shares - number of tendered shares)</p> <p>New number of shares = old number of shares - number of tendered shares</p> <p>Divisor: decreases</p>
<p>(7) <i>Spin-off:</i></p> <p>Adjusted price = (closing price * A - price of spun-off shares * B) / A</p> <p>Divisor: decreases</p>	
<p>(8) <i>Combination stock distribution (dividend or split) and rights offering:</i></p> <p>For this corporate action, the following additional assumptions apply:  Shareholders receive B new shares from the distribution and C new shares from the rights offering for every A shares held  If A is not equal to one share, all the following “new number of shares” formulae need to be divided by A:</p>	
<p>— <i>If rights are applicable after stock distribution (one action applicable to other):</i></p> <p>Adjusted price = (closing price * A + subscription price * C * (1 + B / A)) / ((A + B) * (1 + C / A))</p> <p>New number of shares = old number of shares * ((A + B) * (1 + C / A)) / A</p> <p>Divisor: increases</p>	<p>— <i>If stock distribution is applicable after rights (one action applicable to other):</i></p> <p>Adjusted price = (closing price * A + subscription price * C) / ((A + C) * (1 + B / A))</p> <p>New number of shares = old number of shares * ((A + C) * (1 + B / A))</p> <p>Divisor: increases</p>
<p>— <i>Stock distribution and rights (neither action is applicable to the other):</i></p> <p>Adjusted price = (closing price * A + subscription price * C) / (A + B + C)</p> <p>New number of shares = old number of shares * (A + B + C) / A</p> <p>Divisor: increases</p>	

## **License Agreement with STOXX Limited**

We have entered into an agreement with STOXX Limited providing us and certain of our affiliates or subsidiaries identified in that agreement with a non-exclusive license and, for a fee, with the right to use the Dow Jones EURO STOXX 50® Index, which is owned and published by STOXX Limited, in connection with certain securities, including the Securities.

The Securities are not sponsored, endorsed, sold or promoted by STOXX Limited (including its affiliates) (collectively referred to as “**STOXX Limited**”). STOXX Limited has not passed on the legality or suitability of, or the accuracy or adequacy of descriptions and disclosures relating to the Securities. STOXX Limited makes no representation or warranty, express or implied to the owners of the Securities or any member of the public regarding the advisability of investing in securities generally or in the Securities particularly, or the ability of the Dow Jones EURO STOXX 50® Index to track general stock market performance. STOXX Limited and Dow Jones have no relationship to Deutsche Bank AG other than the licensing of the Dow Jones EURO STOXX 50® Index and the related trademarks for use in connection with the Securities, which index is determined, composed and calculated by STOXX Limited without regard to Deutsche Bank AG or the Securities. STOXX Limited and Dow Jones have no obligation to take the needs of Deutsche Bank AG or the holders of the Securities into consideration in determining, composing or calculating the Dow Jones EURO STOXX 50® Index. STOXX Limited and Dow Jones are not responsible for and have not participated in the determination of the timing of, prices at, or quantities of the Securities to be issued or in the determination or calculation of the equation by which the Securities are to be converted into cash. STOXX Limited and Dow Jones have no liability in connection with the administration, marketing or trading of the Securities.

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## **Discontinuation of the Dow Jones EURO STOXX 50® Index; Alteration of Method of Calculation**

If STOXX Limited discontinues publication of the Dow Jones EURO STOXX 50® Index and STOXX Limited or another entity publishes a successor or substitute index that the calculation agent determines, in its sole discretion, to be comparable to the discontinued Dow Jones EURO STOXX 50® Index (such index being referred to herein as a “**Dow Jones EURO STOXX successor index**”), then any Dow Jones EURO STOXX 50® Index closing level will be determined by reference to the level of such Dow Jones EURO STOXX successor index at the close of trading on the relevant exchange or market for the Dow Jones EURO STOXX successor index on the Final Valuation Date or other relevant date.

Upon any selection by the calculation agent of a Dow Jones EURO STOXX successor index, the calculation agent will cause written notice thereof to be promptly furnished to the trustee, to us and to the holders of the Securities.

If STOXX Limited discontinues publication of the Dow Jones EURO STOXX 50® Index prior to, and such discontinuance is continuing on, the Final Valuation Date or other relevant date, and the calculation agent determines, in its sole discretion, that no Dow Jones EURO STOXX successor index is available at such time or the calculation agent has previously selected a Dow Jones EURO STOXX successor index and publication of such Dow Jones EURO STOXX successor index is discontinued prior to, and such discontinuation is continuing on, the Final Valuation Date or other relevant date, then the calculation agent will determine the Dow Jones EURO STOXX 50® Index closing level for such date. The Dow Jones EURO STOXX 50® Index closing level will be computed by the calculation agent in accordance with the formula for and method of calculating the Dow Jones EURO STOXX 50® Index or Dow Jones EURO STOXX successor index, as applicable, last in effect prior to such discontinuance, using the closing price (or, if trading in the relevant securities has been materially suspended or materially limited, its good faith estimate of the closing price that would have prevailed but for such suspension or limitation) at the close of the principal trading session on such date of each security most recently comprising the Dow Jones EURO STOXX 50® Index or Dow Jones EURO STOXX successor index, as applicable. Notwithstanding these alternative arrangements, discontinuance of the publication of the Dow Jones EURO STOXX 50® Index or Dow Jones EURO STOXX successor index, as applicable, on the relevant exchange may adversely affect the value of the Securities.

If at any time the method of calculating the Dow Jones EURO STOXX 50® Index or a Dow Jones EURO STOXX successor index, or the level thereof, is changed in a material respect, or if the Dow Jones EURO STOXX 50® Index or a Dow Jones EURO STOXX successor index is in any other way modified so that the Dow Jones EURO STOXX 50® Index or such Dow Jones EURO STOXX successor index does not, in the opinion of the calculation agent, fairly represent the level of the Dow Jones EURO STOXX 50® Index or such Dow Jones EURO STOXX successor index had such changes or modifications not been made, then the calculation agent will, at the close of business in New York City on each date on which the EURO STOXX 50® Index closing level is to be determined, make such calculations and adjustments as, in the good faith judgment of the calculation agent, may be necessary in order to arrive at a level of a stock index comparable to the Dow Jones EURO STOXX 50® Index or such Dow Jones EURO STOXX successor index, as the case may be, as if such changes or modifications had not been made, and the calculation agent will calculate the Dow Jones EURO STOXX 50® Index closing level with reference to the Dow Jones EURO STOXX 50® Index or such Dow Jones EURO STOXX successor index, as adjusted. Accordingly, if the method of calculating the Dow Jones EURO STOXX 50® Index or a Dow Jones EURO STOXX successor index is modified so that the level of

the Dow Jones EURO STOXX 50® Index or such Dow Jones EURO STOXX successor index is a fraction of what it would have been if there had been no such modification (*e.g.*, due to a split in the Dow Jones EURO STOXX 50® Index or such Dow Jones EURO STOXX successor index), then the calculation agent will adjust the Dow Jones EURO STOXX 50® Index or such Dow Jones EURO STOXX successor index in order to arrive at a level of the Dow Jones EURO STOXX 50® Index or such Dow Jones EURO STOXX successor index as if there had been no such modification (*e.g.*, as if such split had not occurred).

### **The Nikkei® 225 Index**

We have derived all information contained in this underlying supplement regarding the Nikkei® 225 Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information. Such information reflects the policies of, and is subject to change by Nikkei Inc. (known as Nihon Keizai Shimbun, Inc. prior to January 1, 2007). Nikkei Inc. has no obligation to continue to publish, and may discontinue publication of, the Nikkei® 225 Index.

The Nikkei® 225 Index is a stock index calculated, published and disseminated by Nikkei Inc. that measures the composite price performance of selected Japanese stocks. The Nikkei® 225 Index currently is based on 225 underlying stocks (the “**Nikkei Underlying Stocks**”) trading on the Tokyo Stock Exchange (“**TSE**”) representing a broad cross-section of Japanese industries. All 225 Nikkei Underlying Stocks are stocks listed in the First Section of the TSE. Stocks listed in the First Section of the TSE are among the most actively traded stocks on the TSE. Nikkei Inc. rules require that the 75 most liquid issues (one-third of the component count of the Nikkei® 225 Index) be included in the Nikkei® 225 Index.

The 225 companies included in the Nikkei® 225 Index are divided into six sector categories: Technology, Financials, Consumer Goods, Materials, Capital Goods/Others and Transportation and Utilities. These six sector categories are further divided into 36 industrial classifications as follows:

- Technology—Pharmaceuticals, Electrical Machinery, Automobiles, Precision Machinery, Telecommunications;
- Financials—Banks, Miscellaneous Finance, Securities, Insurance;
- Consumer Goods—Marine Products, Food, Retail, Services;
- Materials—Mining, Textiles, Paper and Pulp, Chemicals, Oil, Rubber, Ceramics, Steel, Nonferrous Metals, Trading House;
- Capital Goods/Others—Construction, Machinery, Shipbuilding, Transportation Equipment, Miscellaneous Manufacturing, Real Estate; and
- Transportation and Utilities—Railroads and Buses, Trucking, Shipping, Airlines, Warehousing, Electric Power, Gas.

The Nikkei® 225 Index is a modified, price-weighted index (*i.e.*, a Nikkei Underlying Stock’s weight in the index is based on its price per share rather than the total market capitalization of the issuer) that is calculated by (i) multiplying the per share price of each Nikkei Underlying Stock by the corresponding weighting factor for such Nikkei Underlying Stock (a “**Weight Factor**”), (ii) calculating the sum of all these products and (iii) dividing such sum by a divisor (the “**Divisor**”). The Divisor was initially set at 225 for the date of May 16, 1949 using historical numbers from May 16, 1949, the date on which the TSE was reopened. The Divisor was 23.154 as of October 1, 2003, and is subject to periodic adjustments as set forth below. Each Weight



Factor is computed by dividing ¥50 by the par value of the relevant Nikkei Underlying Stock, so that the share price of each Nikkei Underlying Stock when multiplied by its Weight Factor corresponds to a share price based on a uniform par value of ¥50. The stock prices used in the calculation of the Nikkei® 225 Index are those reported by a primary market for the Nikkei Underlying Stocks (currently the TSE). The level of the Nikkei® 225 Index is calculated once per minute during TSE trading hours.

In order to maintain continuity in the Nikkei® 225 Index in the event of certain changes due to non-market factors affecting the Nikkei Underlying Stocks, such as the addition or deletion of stocks, substitution of stocks, stock splits or distributions of assets to stockholders, the Divisor used in calculating the Nikkei® 225 Index is adjusted in a manner designed to prevent any instantaneous change or discontinuity in the level of the Nikkei® 225 Index. Thereafter, the Divisor remains at the new value until a further adjustment is necessary as the result of another change. As a result of such change affecting any Nikkei Underlying Stock, the Divisor is adjusted in such a way that the sum of all share prices immediately after such change multiplied by the applicable Weight Factor and divided by the new Divisor (*i.e.*, the level of the Nikkei® 225 Index immediately after such change) will be equal to the level of the Nikkei® 225 Index immediately prior to the change.

A Nikkei Underlying Stock may be deleted or added by Nikkei Inc. Any stock becoming ineligible for listing in the First Section of the TSE due to any of the following reasons will be deleted from the Nikkei Underlying Stocks: (i) bankruptcy of the issuer, (ii) merger of the issuer with, or acquisition of the issuer by, another company, (iii) delisting of such stock, (iv) transfer of such stock to the “Seiri-Post” because of excess debt of the issuer or because of any other reason or (v) transfer of such stock to the Second Section. In addition, a component stock transferred to the “Kanri-Post” (Posts for stocks under supervision) is in principle a candidate for deletion. Nikkei Underlying Stocks with relatively low liquidity, based on trading value and rate of price fluctuation over the past five years, may be deleted by Nikkei. Upon deletion of a stock from the Nikkei Underlying Stocks, Nikkei Inc. will select a replacement for such deleted Nikkei Underlying Stock in accordance with certain criteria. In an exceptional case, a newly listed stock in the First Section of the TSE that is recognized by Nikkei Inc. to be representative of a market may be added to the Nikkei Underlying Stocks. In such a case, an existing Underlying Stock with low trading volume and deemed not to be representative of a market will be deleted by Nikkei Inc.

A list of the issuers of the Nikkei Underlying Stocks constituting the Nikkei® 225 Index is available from the Nikkei Economic Electronic Databank System and from the Stock Market Indices Data Book published by Nikkei Inc. Nikkei Inc. may delete, add or substitute any stock underlying the Nikkei® 225 Index. Nikkei Inc. first calculated and published the Nikkei® 225 Index in 1970.



## **License Agreement with Nikkei Inc.**

We have entered into an agreement with Nikkei Inc. providing us and certain of our affiliates or subsidiaries identified in that agreement with a non-exclusive license and, for a fee, with the right to use the Nikkei® 225 Index, which is owned and published by Nikkei Inc., in connection with certain securities, including the Securities.

Our license agreement with Nikkei Inc. provides that Nikkei Inc. will assume no obligation or responsibility for use of the Nikkei® 225 Index by us or our affiliates and that all use and implementation relating to the license agreement shall be conducted exclusively at the risk of Deutsche Bank AG.

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**THE SECURITIES ARE NOT IN ANY WAY SPONSORED, ENDORSED OR PROMOTED BY THE INDEX SPONSOR. THE INDEX SPONSOR DOES NOT MAKE ANY WARRANTY OR REPRESENTATION WHATSOEVER, EXPRESS OR IMPLIED, EITHER AS TO THE RESULTS TO BE OBTAINED AS TO THE USE OF THE NIKKEI® 225 INDEX OR THE FIGURE AS WHICH THE NIKKEI® 225 INDEX STANDS AT ANY PARTICULAR DAY OR OTHERWISE. NIKKEI® 225 INDEX IS COMPILED AND CALCULATED SOLELY BY THE INDEX SPONSOR. HOWEVER, THE INDEX SPONSOR SHALL NOT BE LIABLE TO ANY PERSON FOR ANY ERROR IN THE NIKKEI® 225 INDEX, AND THE INDEX SPONSOR SHALL NOT BE UNDER ANY OBLIGATION TO ADVISE ANY PERSON, INCLUDING A PURCHASER OR SELLER OF THE SECURITIES, OF ANY ERROR THEREIN.**

**IN ADDITION, THE INDEX SPONSOR GIVES NO ASSURANCE REGARDING ANY MODIFICATION OR CHANGE IN ANY METHODOLOGY USED IN CALCULATING THE NIKKEI® 225 INDEX AND IS UNDER NO OBLIGATION TO CONTINUE THE CALCULATION, PUBLICATION AND DISSEMINATION OF THE NIKKEI® 225 INDEX.**

## **The Tokyo Stock Exchange**

The TSE is one of the world’s largest securities exchanges in terms of market capitalization. Trading hours are currently from 9:00 a.m. to 11:00 a.m. and from 12:30 p.m. to 3:00 p.m., Tokyo time, Monday through Friday.

Due to the time zone difference, on any normal trading day the TSE will close prior to the opening of business in New York City on the same calendar day. Therefore, the closing level of the Nikkei® 225 Index on a trading day will generally be available in the United States by the opening of business on the same calendar day.

The TSE has adopted certain measures, including daily price floors and ceilings on individual stocks, intended to prevent any extreme short-term price fluctuations resulting from

order imbalances. In general, any stock listed on the TSE cannot be traded at a price lower than the applicable price floor or higher than the applicable price ceiling. These price floors and ceilings are expressed in absolute Japanese yen, rather than percentage limits based on the closing price of the stock on the previous trading day. In addition, when there is a major order imbalance in a listed stock, the TSE posts a “special bid quote” or a “special asked quote” for that stock at a specified higher or lower price level than the stock’s last sale price in order to solicit counter-orders and balance supply and demand for the stock. Prospective investors should also be aware that the TSE may suspend the trading of individual stocks in certain limited and extraordinary circumstances, including, for example, unusual trading activity in that stock. As a result, changes in the Nikkei® 225 Index may be limited by price limitations or special quotes, or by suspension of trading, on individual stocks that make up the Nikkei® 225 Index, and these limitations, in turn, may adversely affect the value of the Securities.

### **Discontinuation of the Nikkei® 225 Index; Alteration of Method of Calculation**

If Nikkei Inc. discontinues publication of the Nikkei® 225 Index, and Nikkei Inc. or another entity publishes a successor or substitute index that the calculation agent determines, in its sole discretion, to be comparable to the discontinued Nikkei® 225 Index (such index being referred to herein as a “**Nikkei successor index**”), then any Nikkei® 225 Index closing level will be determined by reference to the level of such Nikkei successor index at the close of trading on the TSE (2nd session) or the relevant exchange or market for the successor index on the Final Valuation Date or other relevant date.

Upon any selection by the calculation agent of a Nikkei successor index, the calculation agent will cause written notice thereof to be promptly furnished to the trustee, to us and to the holders of the Securities.

If Nikkei Inc. discontinues publication of the Nikkei® 225 Index prior to, and such discontinuance is continuing on, the Final Valuation Date or other relevant date, and the calculation agent determines, in its sole discretion, that no successor index is available at such time, or the calculation agent has previously selected a Nikkei successor index and publication of such Nikkei successor index is discontinued prior to and such discontinuation is continuing on the Final Valuation Date or other relevant date, then the calculation agent will determine the index closing level for the Nikkei® 225 Index for such date. The index closing level for the Nikkei® 225 Index will be computed by the calculation agent in accordance with the formula for and method of calculating the Nikkei® 225 Index or Nikkei successor index, as applicable, last in effect prior to such discontinuance, using the closing price (or, if trading in the relevant securities has been materially suspended or materially limited, its good faith estimate of the closing price that would have prevailed but for such suspension or limitation) at the close of the principal trading session on such date of each security most recently comprising the Nikkei® 225 Index or Nikkei successor index, as applicable. Notwithstanding these alternative arrangements, discontinuation of the publication of the Nikkei® 225 Index or Nikkei successor index, as applicable, on the relevant exchange may adversely affect the value of the Securities.

If at any time the method of calculating the Nikkei® 225 Index or a Nikkei successor index, or the level thereof, is changed in a material respect, or if the Nikkei® 225 Index or a Nikkei successor index is in any other way modified so that the Nikkei® 225 Index or such Nikkei successor index does not, in the opinion of the calculation agent, fairly represent the level of the Nikkei® 225 Index or such Nikkei successor index had such changes or modifications not been made, then, from and after such time, the calculation agent will, at the close of business in New York City on each date on which the Nikkei® 225 Index closing level is to be determined, make such calculations and adjustments as, in the good faith judgment of the calculation agent, may

be necessary in order to arrive at a level of a stock index comparable to the Nikkei® 225 Index or such Nikkei successor index, as the case may be, as if such changes or modifications had not been made, and the calculation agent will calculate the Nikkei® 225 Index closing level with reference to the Nikkei® 225 Index or such Nikkei successor index, as adjusted. Accordingly, if the method of calculating the Nikkei® 225 Index or a Nikkei successor index is modified so that the level of the Nikkei® 225 Index or such Nikkei successor index is a fraction of what it would have been if there had been no such modification (*e.g.*, due to a split in the Nikkei® 225 Index or such Nikkei successor index), then the calculation agent will adjust its calculation of the Nikkei® 225 Index or such Nikkei successor index in order to arrive at a level of the Nikkei® 225 Index or such Nikkei successor index as if there had been no such modification (*e.g.*, as if such split had not occurred).

### **The Hang Seng China Enterprises Index**

We have derived all information contained in this underlying supplement regarding the Hang Seng China Enterprises Index, including, without limitation, its composition, method of calculation and changes in its components, from publicly available information. Such information reflects the policies of HSI Services Limited (“**HSI**”) and is subject to change at the discretion of HSI Services. We make no representation or warranty as to the accuracy or completeness of such information. HSI is under no obligation to continue to publish, and may discontinue or suspend the publication of, the Hang Seng China Enterprises Index at any time.

### **Hang Seng China Enterprises Index Composition and Maintenance**

The Hang Seng China Enterprises Index is compiled, published and managed by HSI, a wholly-owned subsidiary of the Hang Seng Bank. The Hang Seng China Enterprises Index was launched on August 8, 1994 as a market-capitalization weighted index consisting of all the Hong Kong listed H-shares of Chinese enterprises one year after the first H-share company was listed on The Stock Exchange of Hong Kong Ltd. (“**SEHK**”). H-shares are Hong Kong listed shares, traded in Hong Kong dollars, of Chinese state-owned enterprises. With the launch of the 200-stock Hang Seng Composite Index (“**HSCI**”) on October 3, 2001, the Hang Seng China Enterprises Index became part of the Hang Seng Composite Index Series (the “**HSCI Series**”). Since then, constituents of the Hang Seng China Enterprises Index comprise only the largest H-share companies included in the HSCI. The Hang Seng China Enterprises Index had a base value of 1,000 at launch, but was rebased on October 3, 2001 following the launch of the HSCI Series with a value of 2,000 on January 3, 2000 to align the Hang Seng China Enterprises Index with the HSCI Series. As of March 12, 2007, the Hang Seng China Enterprises Index had 41 constituents. The Hang Seng China Enterprises Index is reviewed semi-annually at the same time as the HSCI Series. H-Share companies joining or leaving the HSCI are automatically included or excluded from the Hang Seng China Enterprises Index.

To be included in the HSCI and be eligible for inclusion in the Hang Seng China Enterprises Index, a component stock must have a primary listing on the Main Board of the SEHK, and the issuer of such component stock must not have (i) a secondary listing in Hong Kong, (ii) stocks listed on the Growth Enterprises Market or (iii) preference shares, debt securities or other derivatives. A component stock is removed from the HSCI following the semi-annual review process if (a) it experienced more than 20 trading days without turnover during the preceding 12 months (excluding days on which such component stock was suspended from trading) or (b) the component stock’s 12-month average market capitalization rank falls to the 240th position or below. Component stocks with less than one year listing history are counted on a pro-rata basis. A component stock is added to the HSCI following the semi-annual review process if (a) it experienced less than 20 trading days without turnover during the preceding 12

months (excluding days on which such component stock was suspended from trading) and (b) the component stock's 12-month average market capitalization rank rises to the 160th position or above. The number of component stocks in the HSCI is fixed at 200, and, in the event that the number of component stocks that are removed from and added to the HSCI is not the same, the next highest ranking component stock will be added or the next lowest ranking component stock will be removed, as the case may be.

The calculation methodology of the Hang Seng China Enterprises Index changed on March 6, 2006 to a free float-adjusted market capitalization methodology. This free float adjustment aims to exclude from the index calculation long-term core shareholdings that are not readily available for trading. A free float-adjusted factor, which represents the proportion of shares that are free-floating as a percentage of issued shares, is now used to adjust the number of shares for index calculation. A cap of 15% is placed on individual component stock weights in the Hang Seng China Enterprises Index, which are reviewed semi-annually to ensure that no one component stock dominates the Hang Seng China Enterprises Index. If any component stock exceeds 15% of the value of the Hang Seng China Enterprises Index, HSI will cap such component stock's representation in the Hang Seng China Enterprises Index at 15% until the next following semi-annual review. The following shareholdings are viewed as strategic in nature and are excluded from the Hang Seng China Enterprises Index calculation:

- shares held by strategic shareholder(s) who individually or collectively control more than 30% of the shareholdings;
- shares held by director(s) who individually control more than 5% of the shareholdings;
- shares held by a Hong Kong-listed company that controls more than 5% of the shareholdings as investments; and
- shares held by shareholder(s) who individually or collectively represent more than 5% of the shareholdings in the company and have a publicly disclosed lock-up arrangement.

#### **License Agreement with HSI**

We have entered into an agreement with HSI providing us and certain of our affiliates or subsidiaries identified in that agreement with a non-exclusive license and, for a fee, with the right to use the Hang Seng China Enterprises Index, which is owned and published by HSI, in connection with certain securities, including the Securities.

The Hang Seng China Enterprises Index is published and compiled by HSI pursuant to a license from Hang Seng Data Services Limited. The mark and name of the Hang Seng China Enterprises Index are proprietary to Hang Seng Data Services Limited. HSI and Hang Seng Data Services Limited have agreed to the use of, and reference to, the Hang Seng China Enterprises Index by Deutsche Bank AG in connection with the Securities (the "**Product**"), **BUT NEITHER HSI NOR HANG SENG DATA SERVICES LIMITED WARRANTS OR REPRESENTS OR GUARANTEES TO ANY BROKER OR HOLDER OF THE PRODUCT OR ANY OTHER PERSON (i) THE ACCURACY OR COMPLETENESS OF THE HANG SENG CHINA ENTERPRISES INDEX AND ITS COMPUTATION OR ANY INFORMATION RELATED THERETO; (ii) THE FITNESS OR SUITABILITY FOR ANY PURPOSE OF THE HANG SENG CHINA ENTERPRISES INDEX OR ANY COMPONENT STOCK OR DATA UNDERLYING THE HANG SENG CHINA ENTERPRISES INDEX; OR (iii) THE RESULTS WHICH MAY BE OBTAINED BY ANY PERSON FROM THE USE OF THE HANG SENG CHINA ENTERPRISES INDEX OR ANY COMPONENT STOCK OR DATA UNDERLYING THE HANG SENG CHINA ENTERPRISES INDEX FOR ANY PURPOSE, AND NO WARRANTY OR REPRESENTATION OR GUARANTEE OF ANY KIND WHATSOEVER RELATING TO**

**THE HANG SENG CHINA ENTERPRISES INDEX IS GIVEN OR MAY BE IMPLIED.** The process and basis of computation and compilation of the Hang Seng China Enterprises Index and any of the related formulae, component stocks underlying the Hang Seng China Enterprises Index and factors may at any time be changed or altered by HSI without notice. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, NO RESPONSIBILITY OR LIABILITY IS ACCEPTED BY HSI OR HANG SENG DATA SERVICES LIMITED (i) IN RESPECT OF THE USE OF AND/OR REFERENCE TO THE HANG SENG CHINA ENTERPRISES INDEX BY DEUTSCHE BANK AG IN CONNECTION WITH THE PRODUCT; (ii) FOR ANY INACCURACIES, OMISSIONS, MISTAKES OR ERRORS OF HSI IN THE COMPUTATION OF THE HANG SENG CHINA ENTERPRISES INDEX; (iii) FOR ANY INACCURACIES, OMISSIONS, MISTAKES, ERRORS OR INCOMPLETENESS OF ANY INFORMATION USED IN CONNECTION WITH THE COMPUTATION OF THE HANG SENG CHINA ENTERPRISES INDEX WHICH IS SUPPLIED BY ANY OTHER PERSON; OR (iv) FOR ANY ECONOMIC OR OTHER LOSS WHICH MAY BE DIRECTLY OR INDIRECTLY SUSTAINED BY ANY BROKER OR HOLDER OF THE PRODUCT OR ANY OTHER PERSON DEALING WITH THE PRODUCT AS A RESULT OF ANY OF THE AFORESAID, AND NO CLAIMS, ACTIONS OR LEGAL PROCEEDINGS MAY BE BROUGHT AGAINST HSI AND/OR HANG SENG DATA SERVICES LIMITED** in connection with the Product in any manner whatsoever by any broker, holder or other person dealing with the Product. Any broker, holder or other person dealing with the Product does so therefore in full knowledge of this disclaimer and can place no reliance whatsoever on HSI and Hang Seng Data Services Limited. For the avoidance of doubt, this disclaimer does not create any contractual or quasi-contractual relationship between any broker, holder or other person and HSI and/or Hang Seng Data Services Limited and must not be construed to have created such relationship.

#### **Discontinuation of the Hang Seng China Enterprises Index; Alteration of Method of Calculation**

If HSI discontinues publication of the Hang Seng China Enterprises Index, and HSI or another entity publishes a successor or substitute index that the calculation agent determines, in its sole discretion, to be comparable to the discontinued Hang Seng China Enterprises Index (such index being referred to herein as a **"Hang Seng China Enterprises successor index"**), then any Hang Seng China Enterprises Index closing level will be determined by reference to the level of such Hang Seng China Enterprises successor index at the close of trading on the relevant exchanges or markets for the Hang Seng China Enterprises successor index on the Final Valuation Date or other relevant date.

Upon any selection by the calculation agent of a Hang Seng China Enterprises successor index, the calculation agent will cause written notice thereof to be promptly furnished to the trustee, to us and to the holders of the Securities.

If HSI discontinues publication of the Hang Seng China Enterprises Index prior to, and such discontinuance is continuing on, the Final Valuation Date or other relevant date, and the calculation agent determines, in its sole discretion, that no Hang Seng China Enterprises successor index is available at such time, or the calculation agent has previously selected a Hang Seng China Enterprises successor index, and publication of such Hang Seng China Enterprises successor index is discontinued prior to, and such discontinuation is continuing on, the Final Valuation Date or other relevant date, then the calculation agent will determine the Hang Seng China Enterprises Index closing level for such date. The Hang Seng China Enterprises Index closing level will be computed by the calculation agent in accordance with the formula for and method of calculating the Hang Seng China Enterprises Index or the Hang Seng China Enterprises successor index, as applicable, last in effect prior to such discontinuance, using the closing level (or, if trading in the relevant securities has been materially suspended or



materially limited, its good faith estimate of the closing level that would have prevailed but for such suspension or limitation) at the close of the principal trading session on such date of each security most recently comprising the Hang Seng China Enterprises Index or the Hang Seng China Enterprises successor index, as applicable. Notwithstanding these alternative arrangements, discontinuance of the publication of the Hang Seng China Enterprises Index or the Hang Seng China Enterprises successor index, as applicable, on the relevant exchange may adversely affect the value of the Securities.

If at any time the method of calculating the Hang Seng China Enterprises Index or a Hang Seng China Enterprises successor index, or the level thereof, is changed in a material respect, or if the Hang Seng China Enterprises Index or a Hang Seng China Enterprises successor index is in any other way modified so that the Hang Seng China Enterprises Index or such Hang Seng China Enterprises successor index does not, in the opinion of the calculation agent, fairly represent the level of the Hang Seng China Enterprises Index or such Hang Seng China Enterprises successor index had such changes or modifications not been made, then the calculation agent will, at the close of business in New York City on each date on which the Hang Seng China Enterprises Index is to be determined, make such calculations and adjustments as, in the good faith judgment of the calculation agent, may be necessary in order to arrive at a level of a stock index comparable to the Hang Seng China Enterprises Index or such Hang Seng China Enterprises successor index, as the case may be, as if such changes or modifications had not been made, and the calculation agent will calculate the Hang Seng China Enterprises Index closing level with reference to the Hang Seng China Enterprises Index or such Hang Seng China Enterprises successor index, as adjusted. Accordingly, if the method of calculating the Hang Seng China Enterprises Index or a Hang Seng China Enterprises successor index is modified so that the level of the Hang Seng China Enterprises Index or such Hang Seng China Enterprises successor index is a fraction of what it would have been if there had been no such modification (*e.g.*, due to a split in the Hang Seng China Enterprises Index or such Hang Seng China Enterprises successor index), then the calculation agent will adjust the Hang Seng China Enterprises Index or such Hang Seng China Enterprises successor index in order to arrive at a level of the Hang Seng China Enterprises Index or such Hang Seng China Enterprises successor index as if there had been no such modification (*e.g.*, as if such split had not occurred).

### **The KOSPI 200 Index**

We have derived all information contained in this underlying supplement regarding the KOSPI 200 Index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information. Such information reflects the policies of, and is subject to change by, Korea Exchange (“**KRX**”), the publisher of the KOSPI 200 Index. KRX has no obligation to continue to publish, and may discontinue publication of, the KOSPI 200 Index.

The KOSPI 200 Index is a capitalization-weighted index of 200 Korean blue-chip stocks that make up a large majority of the total market value of the Korea Stock Exchange (“**KSE**”). The KOSPI 200 Index is the underlying index for stock index futures and options trading. The constituent stocks are selected on the basis of the market value of the individual stocks, liquidity and their relative positions in their respective industry groups.

### **KOSPI 200 Index Composition and Maintenance**

All common stocks listed on the KSE as of the periodic realignment date will be included in the selection process, except for stocks that fall into one of the following categories:

- stocks with administrative issues;



- stocks with liquidation issues;
- stocks issued by securities investment companies;
- stocks that have been listed less than one year as of the last trading in April of the year in which the periodic review and selection process occurs;
- stocks belonging to industry groups other than those industry groups listed below;
- a constituent stock merged into a non-constituent stock;
- a company established as a result of a merger between two constituent stocks; and
- any other stocks that are deemed unsuitable to be included in the constituents of the KOSPI 200 Index.

The companies listed on the KOSPI 200 Index are classified into the following industry groups: (i) fisheries, (ii) mining, (iii) manufacturing, (iv) construction, (v) electricity and gas, (vi) services, (vii) post and communication and (viii) finance. The constituents of the KOSPI 200 Index are selected first from the non-manufacturing industry cluster, and then from the manufacturing industry cluster.

The constituents from the non-manufacturing industry cluster are selected in accordance with the following:

- Selection is made in descending order of market capitalization, from large to small, in the same industry group, while ensuring the accumulated market capitalization of the concerned industry group is within 70% of that of all industry groups.
- Notwithstanding the above, the stocks whose ranking of trading volume in descending order is below 85% of the stocks included in deliberation within the same industry group are excluded. In such case, the excluded stock is replaced by a stock that is next in ranking in market capitalization, but satisfies the trading volume criteria. The constituents from the manufacturing industry cluster are selected in descending order of market capitalization, while excluding stocks whose ranking of trading volume in descending order is below 85% of the stocks included in the process within the same industry group. The excluded stock is replaced by a stock that is next in ranking in market capitalization, but satisfies the trading volume criteria.

Notwithstanding anything above, if a stock's market capitalization is within the top 50 in terms of market capitalization, such stock may be included in the constituents of the KOSPI 200 Index by taking into consideration the influence that the industry group has on the KOSPI 200 Index as well as the liquidity of the concerned stock. Stocks to be placed on the replacement list are selected from the stocks included for deliberation, excluding those already selected as constituents of the KOSPI 200 Index.

### **KOSPI 200 Index Calculation**

The KOSPI 200 Index is computed by multiplying (i) the market capitalization as of the calculation time divided by the market capitalization as of the base date, by (ii) 100. The base date of the KOSPI 200 Index is January 3, 1990 with a base index of 100. Market capitalization is obtained by multiplying the number of listed common shares of the constituents by the price of the concerned common share.

If the number of listed shares increases due to rights offering, bonus offering and stock dividend, which accompany ex-right or ex-dividend, such increase is included in the number of listed shares on the ex-right date or ex-dividend date. Share prices refer to the market price

established during the regular trading session. If no trading took place on such day, quotation price is used and if no quotation price is available, the closing price of the most recent trading day is used.

### **KOSPI 200 Index Stock Revision**

The constituents of the KOSPI 200 Index are re-aligned once a year while observing each of the following:

- an existing constituent will not be removed if the ranking of the market capitalization of such stock is within 100/110 of the ranking of the KOSPI 200 Index constituents of the same industry group;
- in order to be included in the constituents of the KOSPI 200 Index, the ranking of the market capitalization of a stock must be within 90/100 of the ranking of the KOSPI 200 Index constituents of the same industry group;
- if the ranking of the market capitalization of an existing constituent falls below 100/110 of the ranking of the KOSPI 200 Index constituents of the same industry group, but there is no stock satisfying the requirement specified in the preceding clause, the existing constituent will not be removed; and
- when removing the existing constituents, a constituent whose ranking of market capitalization within the same industry group is the lowest will be removed first.

The periodic re-alignment date is the trading day following the last trading day of June contracts in the KOSPI 200 Index futures and index options. With respect to any component security in the KOSPI 200 Index, if any of the following events occur, such component security shall be removed from the KOSPI 200 Index and the removal date is as follows:

- Delisting: the trading day following the delisting date;
- Designation as administrative issue: the designation date;
- Merger: the day of trading halt; and
- It is determined that the stock is unsuitable as a component security of the KOSPI 200 Index: the trading day following the day of such determination, which is the last trading day of the nearest month contracts of both the index futures and index options, after the date of such decision.

When re-aligning the component securities of the KOSPI 200 Index, the replacement stocks are chosen from the replacement list in accordance with the rank order. In the case of an industry group that has no stock listed on the replacement list, a replacement stock is chosen from the replacement list of manufacturing industry cluster.

### **License Agreement with Korea Exchange**

We have entered into an agreement with KRX providing us and certain of our affiliates or subsidiaries identified in that agreement with a non-exclusive license and, for a fee, with the right to use the KOSPI 200 Index, which is owned and published by KRX, in connection with certain securities, including the Securities.

The Securities are not sponsored, endorsed, sold or promoted by KRX. KRX makes no representation or warranty, express or implied, to the owners of the Securities or any member of the public regarding the advisability of investing in securities generally or in the Securities

particularly or the ability of the KOSPI 200 Index to track general stock market performance. KRX's only relationship to Deutsche Bank AG is the licensing of certain trademarks and trade names of KRX and of the KOSPI 200 Index which is determined, composed and calculated by KRX without regard to Deutsche Bank AG or the Securities. KRX has no obligation to take the needs of Deutsche Bank AG or the owners of the Securities into consideration in determining, composing or calculating the KOSPI 200 Index. KRX is not responsible for and has not participated in the determination of the price and amount of Securities to be issued or the timing of the issuance or sale of the Securities or in the determination or calculation of the equation by which the Securities are to be converted into cash. KRX has no obligation or liability in connection with the administration, marketing or trading of the Securities.

**KRX DOES NOT GUARANTEE THE ACCURACY AND/OR THE COMPLETENESS OF THE KOSPI 200 INDEX OR ANY DATA INCLUDED THEREIN AND KRX SHALL HAVE NO LIABILITY FOR ANY ERRORS, OMISSIONS, OR INTERRUPTIONS THEREIN. KRX MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO RESULTS TO BE OBTAINED BY DEUTSCHE BANK AG, OWNERS OF THE SECURITIES, OR ANY OTHER PERSON OR ENTITY FROM THE USE OF THE KOSPI 200 INDEX OR ANY DATA INCLUDED THEREIN. KRX MAKES NO EXPRESS OR IMPLIED WARRANTIES, AND EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE KOSPI 200 INDEX OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL KRX HAVE ANY LIABILITY FOR ANY SPECIAL, PUNITIVE, INDIRECT, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.**

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### **The Korea Stock Exchange**

The KSE's predecessor, the Daehan Stock Exchange, was established in 1956. The KSE is a typical order-driven market, where buy and sell orders compete for best prices. The KSE seeks to maintain a fair and orderly market for trading and regulates and supervises its member firms.

Throughout the trading hours, orders are matched at a price satisfactory to both buy and sell sides, according to price and time priorities. The opening and closing prices, however, are determined by call auctions: at the market opening and closing, orders received for a certain period of time are pooled and matched at the price at which the most number of shares can be executed. The KSE uses electronic trading procedures, from order placement to trade confirmation. The KSE is open from 9:00 a.m. to 3:00 p.m., Korean time, during weekdays. Investors can submit their orders from 8:00 a.m., one hour before the market opening. Orders delivered to the market during the period from 8:00 a.m. to 9:00 a.m. are queued in the order book and matched by call auction method at 9:00 a.m. to determine opening prices. After opening prices are determined, the trades are conducted by continuous auctions until 2:50 p.m. (10 minutes before the market closing). Besides the regular session, the KSE conducts pre-hours and after-hours sessions for block trading and basket trading. During pre-hours sessions from 7:30 a.m. to 8:30 a.m., orders are matched at the previous day's respective closing prices. After-hours sessions are open for 50 minutes from 3:10 p.m. to 4:00 p.m. During after-hours sessions, orders are matched at the closing prices of the day.

On January 26, 2004, the KSE introduced the random-end system at the opening and closing call auctions. The stated purpose of the random-end system is to prevent any distortion

in the price discovery function of the KSE caused by “fake” orders placed with an intention of misleading other investors. In cases where the highest or lowest indicative price of a stock set during the last 5 minutes before the closing time of the opening (or closing) call session, 8:55-9:00 a.m. (or 2:55-3:00 p.m.), deviates from the provisional opening (or closing) price by 5% or more, the KSE delays the determination of the opening (or closing) price of the stock up to 5 minutes. The official opening (or closing) price of such stock is determined at a randomly chosen time within 5 minutes after the regular opening (or closing) time. The KSE makes public the indicative prices during the opening (or closing) call trading sessions. Pooling together all bids and offers placed during the order receiving hours for the opening (or closing) session, 8:10-9:00 a.m. (or 2:50-3:00 p.m.), the indicative opening (or closing) prices of all stocks are released to the public on a real-time basis.

The KSE sets a limit on the range that the price of individual stocks can change during a day. As of June 2004, that limit was set at 15%, which meant that the price of each stock could neither fall nor rise by more than 15% from the previous day’s closing price. In addition, when the price and/or trading activities of a stock are expected to show an abnormal movement in response to an unidentified rumor or news, or when an abnormal movement is observed in the market, the KSE may halt the trading of the stock. In such cases, the KSE requests the company concerned make a disclosure regarding the matter. Once the company makes an official announcement regarding the matter, trading can resume within an hour; however, if the KSE deems that the situation was not fully resolved by the disclosure, trading resumption may be delayed.

The KSE introduced circuit breakers in December 1998. The trading in the equity markets is halted for 20 minutes when the KOSPI 200 Index falls by 10% or more from the previous day’s closing and the situation lasts for 1 minute or longer. The trading resumes by call auction where the orders submitted during the 10 minutes after the trading halt ended are matched at a single price.

#### **Discontinuation of the KOSPI 200 Index; Alteration of Method of Calculation**

If KRX discontinues publication of the KOSPI 200 Index and KRX or another entity publishes a successor or substitute index that the calculation agent determines, in its sole discretion, to be comparable to the discontinued KOSPI 200 Index (such index being referred to herein as a “**KOSPI 200 successor index**”), then the KOSPI 200 Index closing level will be determined by reference to the level of such KOSPI 200 successor index at the close of trading on the relevant exchange or market for the KOSPI 200 successor index on the Final Valuation Date or other relevant date.

Upon any selection by the calculation agent of a KOSPI 200 successor index, the calculation agent will cause written notice thereof to be promptly furnished to the trustee, to us and to the holders of the Securities.

If KRX discontinues publication of the KOSPI 200 Index prior to, and such discontinuation is continuing on, the Final Valuation Date or other relevant date, and the calculation agent determines, in its sole discretion, that no KOSPI 200 successor index is available at such time, or the calculation agent has previously selected a KOSPI 200 successor index and publication of such KOSPI 200 successor index is discontinued prior to, and such discontinuation is continuing on, the Final Valuation Date or other relevant date, then the calculation agent will determine the KOSPI 200 Index closing level for such date. The KOSPI 200 Index closing level will be computed by the calculation agent in accordance with the formula for and method of calculating the KOSPI 200 Index or KOSPI 200 successor index, as applicable, last in effect prior to such

discontinuation, using the closing price (or, if trading in the relevant securities has been materially suspended or materially limited, its good faith estimate of the closing price that would have prevailed but for such suspension or limitation) at the close of the principal trading session on such date of each security most recently composing the KOSPI 200 Index or KOSPI 200 successor index, as applicable. Notwithstanding these alternative arrangements, discontinuation of the publication of the KOSPI 200 Index on the relevant exchange may adversely affect the value of the Securities.

If at any time the method of calculating the KOSPI 200 Index or a KOSPI 200 successor index, or the level thereof, is changed in a material respect, or if the KOSPI 200 Index or a KOSPI 200 successor index is in any other way modified so that the KOSPI 200 Index or such KOSPI 200 successor index does not, in the opinion of the calculation agent, fairly represent the level of the KOSPI 200 Index or such KOSPI 200 successor index had such changes or modifications not been made, then the calculation agent will, at the close of business in New York City on each date on which the KOSPI 200 Index closing level is to be determined, make such calculations and adjustments as, in the good faith judgment of the calculation agent, may be necessary in order to arrive at a level of a stock index comparable to the KOSPI 200 Index or such KOSPI 200 successor index, as the case may be, as if such changes or modifications had not been made, and the calculation agent will calculate the KOSPI 200 Index closing level with reference to the KOSPI 200 Index or such KOSPI 200 successor index, as adjusted. Accordingly, if the method of calculating the KOSPI 200 Index or a KOSPI 200 successor index is modified so that the level of the KOSPI 200 Index or such KOSPI 200 successor index is a fraction of what it would have been if there had been no such modification (*e.g.*, due to a split in the KOSPI 200 Index), then the calculation agent will adjust its calculation of the KOSPI 200 Index or such KOSPI 200 successor index in order to arrive at a level of the KOSPI 200 Index or such KOSPI 200 successor index as if there had been no such modification (*e.g.*, as if such split had not occurred).

### **The MSCI Singapore Index<sup>SM</sup>**

We have derived all information contained in this underlying supplement regarding the MSCI Singapore Index<sup>SM</sup>, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information. Such information reflects the policies of, and is subject to change by, Morgan Stanley Capital International Inc. (“**MSCI**”). The MSCI Singapore Index<sup>SM</sup> is calculated, maintained and published by MSCI. We make no representation or warranty as to the accuracy or completeness of such information.

### **MSCI Singapore Index<sup>SM</sup> Composition and Maintenance**

MSCI targets an 85% free float adjusted market representation level within each industry group in Singapore. The security selection process within each industry group is based on analysis of the following:

- each company’s business activities and the diversification that its securities would bring to the index;
- the size of the securities based on free float adjusted market capitalization. All other things being equal, MSCI targets for inclusion the most sizable securities in an industry group. In addition, securities that do not meet the minimum size guidelines are not considered for inclusion. Though the following limits are subject to revision, as of the date of this underlying supplement, a security will be eligible for inclusion in the MSCI Singapore Index<sup>SM</sup> if it achieves a free float adjusted market capitalization of U.S. \$250 million and will be eligible for deletion if such capitalization falls below U.S. \$125 million as of the yearly review. If, however, the free float adjusted market capitalization level falls significantly below the free float

adjusted market capitalization level for deletions prior to a yearly review, for example during a quarterly review, then the security may be deleted prior to such yearly review; and

- The liquidity of the securities. All other things being equal, MSCI targets for inclusion the most liquid securities in an industry group. In addition, securities that have inadequate liquidity are not considered for inclusion. MSCI does not define absolute minimum or maximum liquidity levels for stock inclusion or exclusion from the MSCI Singapore Index<sup>SM</sup> but considers each stock's relative standing within Singapore and between cycles. A useful measure to compare liquidity within the same market is the Annualized Traded Value Ratio ("**ATVR**"), which screens out extreme daily trading volumes and takes into account the difference in market capitalization size. The ATVR Ratio of each security is calculated via the following 3-step process:
  - first, monthly median traded values are computed using the daily median traded value, multiplied by the number of days in the month that the security traded. The daily traded value of a security is equal to the number of shares traded during the day, multiplied by the closing price of that security. The daily median traded value is the median of the daily traded values in a given month;
  - second, the monthly median traded value ratio is obtained by dividing the monthly median traded value of a security by its free float adjusted security market capitalization at the end of the month; and
  - third, the ATVR is obtained by multiplying the average of the monthly median trade value ratios of the previous 12 months – or the number of months for which this data is available – by 12.

Only securities of companies with an estimated overall or security free float greater than 15% are generally considered for inclusion in the MSCI Singapore Index<sup>SM</sup>.

For securities not subject to foreign ownership limitations, the free float of a security is estimated as its total number of shares outstanding less shareholdings classified as strategic and/or non-free float. For securities subject to foreign ownership limitations, the estimated free float available to foreign investors is equal to the lesser of (a) the total number of shares outstanding less shareholdings classified as strategic or non-free float and (b) foreign ownership limitation adjusted for non-free float stakes held by foreign investors.

MSCI free float adjusts the market capitalization of each security using an adjustment factor referred to as the Foreign Inclusion Factor ("**FIF**"). Securities not subject to foreign ownership limitations have a FIF equal to (a) the estimated free float, rounded up to the closest 5%, if the securities have a free float greater than 15% or (b) the estimated free float, rounded to the closest 1%, if the securities have a free float less than 15%. For securities subject to foreign ownership limitations, the FIF is equal to the lesser of (a) the estimated free float available to foreign investors (i) rounded up to the closest 5%, if the free float is greater than 15% or (ii) rounded to the closest 1%, if the free float is less than 15% and (b) foreign ownership limitation rounded to the closest 1%.

The "**free float adjusted market capitalization**" of a security is calculated as the product of the FIF and the security's full market capitalization.

There are three broad categories of MSCI Singapore Index<sup>SM</sup> maintenance:

- an annual full country index review that reassesses the various dimensions of the equity universe in Singapore;



- quarterly index reviews, aimed at promptly reflecting other significant market events; and
- ongoing event-related changes, such as mergers and acquisitions, which are generally implemented in the index rapidly as they occur.

During the annual review, additions or deletions of securities are made (i) following the re-appraisal of the free float adjusted industry group representation within a country relative to an 85% target, (ii) following an update of the minimum size guidelines for additions and deletions and (iii) based on a company's and/or security's free float of less than 15% that has decreased in size in terms of free float adjusted market capitalization due to reduction in free float or due to performance and that no longer meet certain criteria.

During a quarterly index review, securities may be added to or deleted from the MSCI Singapore Index<sup>SM</sup> for a variety of reasons, including the following:

- additions or deletions of securities, due to one or more industry groups having become significantly over- or under-represented as a result of mergers, acquisitions, restructuring and other major market events affecting that industry group;
- additions or deletions resulting from changes in industry classification, significant increases or decreases in free float and relaxation/removal or decreases of foreign ownership limits not implemented immediately;
- additions of large companies that did not meet the minimum size criterion for early inclusion at the time of their initial public offering or secondary offering;
- replacement of companies that are no longer suitable industry representatives;
- deletion of securities whose issuing company and/or security free float has fallen to less than 15% and that do not meet certain criteria;
- deletion of securities that have become very small or illiquid; and
- replacement of securities (additions or deletions) resulting from the review of price source for constituents with both domestic and foreign board quotations.

### **MSCI Singapore Index<sup>SM</sup> Calculation**

The MSCI Singapore Index<sup>SM</sup> is computed generally by multiplying the previous day's index level by the free float adjusted market capitalization level of each share in the MSCI Singapore Index<sup>SM</sup> on the prior day divided by the free float adjusted market capitalization level of each share in the MSCI Singapore Index<sup>SM</sup> on the current day. The numerator is adjusted market capitalization, but the denominator is unadjusted, meaning that the price adjustment factor is applied to the numerator, but not to the denominator.

### **License Agreement with Morgan Stanley Capital International Inc. for the MSCI Singapore Index<sup>SM</sup>**

We have entered into an agreement with MSCI providing us and certain of our affiliates or subsidiaries identified in that agreement with a non-exclusive license and, for a fee, with the right to use the MSCI Singapore Index<sup>SM</sup>, which is owned and published by MSCI, in connection with certain securities, including the Securities.

The Securities are not sponsored, endorsed, sold or promoted by MSCI. Neither MSCI nor any other party makes any representation or warranty, express or implied to the owners of the

Securities or any member of the public regarding the advisability of investing in securities generally or in the Securities particularly, or the ability of the MSCI Singapore Index<sup>SM</sup> to track general stock market performance. MSCI is the licensor of certain trademarks, service marks and trade names of MSCI and of MSCI Singapore Index<sup>SM</sup> which index is determined, composed and calculated by MSCI without regard to Deutsche Bank AG. MSCI has no obligation to take the needs of Deutsche Bank AG or the owners of the Securities into consideration in determining, composing or calculating the MSCI Singapore Index<sup>SM</sup>. MSCI is not responsible for and has not participated in the determination of the timing of, prices at, or quantities of the Securities to be issued or in the determination or calculation of the equation by which the Securities are to be converted into cash. Neither MSCI nor any other party has any obligation or liability to owners of the Securities in connection with the administration, marketing or trading of the Securities.

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#### **Discontinuation of the MSCI Singapore Index<sup>SM</sup>; Alteration of Method of Calculation**

If MSCI discontinues publication of the MSCI Singapore Index<sup>SM</sup> and MSCI or another entity publishes a successor or substitute index that the calculation agent determines, in its sole discretion, to be comparable to the discontinued MSCI Singapore Index<sup>SM</sup> (such index being referred to herein as an “**MSCI Singapore successor index**”), then the MSCI Singapore Index<sup>SM</sup> closing level will be determined by reference to the level of such MSCI Singapore successor index at the close of trading on the relevant exchange or market for the MSCI Singapore successor index on the Final Valuation Date or other relevant date.

Upon any selection by the calculation agent of an MSCI Singapore successor index, the calculation agent will cause written notice thereof to be promptly furnished to the trustee, to us and to the holders of the Securities.

If MSCI discontinues publication of the MSCI Singapore Index<sup>SM</sup> prior to, and such discontinuation is continuing on, the Final Valuation Date or other relevant date, and the calculation agent determines, in its sole discretion, that no MSCI Singapore successor index is available at such time, or the calculation agent has previously selected an MSCI Singapore successor index and publication of such MSCI Singapore successor index is discontinued prior to, and such discontinuation is continuing on, the Final Valuation Date or other relevant date, then the calculation agent will determine the MSCI Singapore Index<sup>SM</sup> closing level for such date. The MSCI Singapore Index<sup>SM</sup> closing level will be computed by the calculation agent in accordance with the formula for and method of calculating the MSCI Singapore Index<sup>SM</sup> or MSCI Singapore successor index, as applicable, last in effect prior to such discontinuation, using the closing price (or, if trading in the relevant securities has been materially suspended or materially limited, its good faith estimate of the closing price that would have prevailed but for

such suspension or limitation) at the close of the principal trading session on such date of each security most recently composing the MSCI Singapore Index<sup>SM</sup> or MSCI Singapore successor index, as applicable. Notwithstanding these alternative arrangements, discontinuation of the publication of the MSCI Singapore Index<sup>SM</sup> on the relevant exchange may adversely affect the value of the Securities.

If at any time the method of calculating the MSCI Singapore Index<sup>SM</sup> or an MSCI Singapore successor index, or the level thereof, is changed in a material respect, or if the MSCI Singapore Index<sup>SM</sup> or an MSCI Singapore successor index is in any other way modified so that the MSCI Singapore Index<sup>SM</sup> or such MSCI Singapore successor index does not, in the opinion of the calculation agent, fairly represent the level of the MSCI Singapore Index<sup>SM</sup> or such MSCI Singapore successor index had such changes or modifications not been made, then the calculation agent will, at the close of business in New York City on each date on which the MSCI Singapore Index<sup>SM</sup> closing level is to be determined, make such calculations and adjustments as, in the good faith judgment of the calculation agent, may be necessary in order to arrive at a level of a stock index comparable to the MSCI Singapore Index<sup>SM</sup> or such MSCI Singapore successor index, as the case may be, as if such changes or modifications had not been made, and the calculation agent will calculate the MSCI Singapore Index<sup>SM</sup> closing level with reference to the MSCI Singapore Index<sup>SM</sup> or such MSCI Singapore successor index, as adjusted. Accordingly, if the method of calculating the MSCI Singapore Index<sup>SM</sup> or a MSCI Singapore successor index is modified so that the level of the MSCI Singapore Index<sup>SM</sup> or such MSCI Singapore successor index is a fraction of what it would have been if there had been no such modification (*e.g.*, due to a split in the MSCI Singapore Index<sup>SM</sup>), then the calculation agent will adjust its calculation of the MSCI Singapore Index<sup>SM</sup> or such MSCI Singapore successor index in order to arrive at a level of the MSCI Singapore Index<sup>SM</sup> or such MSCI Singapore successor index as if there had been no such modification (*e.g.*, as if such split had not occurred).